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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/017,413	12/18/2001	Paul William Marsh	71493-973 /pw	6445

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EXAMINER


WANG, QUAN ZHEN

ART UNIT	PAPER NUMBER
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2633

DATE MAILED: 12/20/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	10/017,413	MARSH ET AL.	
	Examiner	Art Unit	
	Quan-Zhen Wang	2633	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 18 December 2001.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-23 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-23 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|-----------------------------------------------------------------------------------------|-----------------------------------------------------------------------------|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Claim Rejections - 35 USC § 112

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

1. Claims 1, 4, 6, 9, 12, 15, 18, 21, 22, 23 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claim 1 recites the limitation "the method" in line 10, page 14. There is insufficient antecedent basis for this limitation in the claim.

Claim 4 recites the limitation "the method " in lines 8-9, page 15. There is insufficient antecedent basis for this limitation in the claim.

Claim 9 recites the limitation "the method " in line 17, page 16. There is insufficient antecedent basis for this limitation in the claim.

Claim 21 recites the limitation "the method " in line 1, page 21. There is insufficient antecedent basis for this limitation in the claim.

Claim 22 recites the limitation "the method " in lines 21-22, page 21. There is insufficient antecedent basis for this limitation in the claim.

Claim 23 recites the limitation "the method " in line 11, page 22. There is insufficient antecedent basis for this limitation in the claim.

Claims 1, 6, 21, 22, 23 recite the limitation "calculating new values of transmitter power levels;" however, the claim language neither clearly shows how the calculating

steps are performed, nor indicates what the new values of transmitter power levels are. Furthermore, the claim language does not show what parameter(s) is/are used for the mentioned calculating. The claim language is unclear and confusing.

Claim 9 recites the "calculating new values of the maximum power levels of the transmitters;" however, the claim language does not clearly show how the calculating steps are performed. Furthermore, the claim language does not show what parameter(s) is/are used for the mentioned calculating. The claim language is unclear and confusing.

Claims 12, 15, 18 recites "means for calculating new values for transmitter power levels", however, the claim language does not clearly show how the calculating steps are performed. It does not indicate what the new values of transmitter power levels are. Furthermore, the claim language does not show what parameter(s) is/are used for the mentioned calculating. The claim language is unclear and confusing.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

2. Claims 1-3, 9-14, 18-23 are rejected under 35 U.S.C. 103(a) as being unpatentable over Beine et al. (U.S. Patent US 6,304,347 B1) in view of Barnard et al. (U.S. Patent US 6,115,157).

Regarding claims 1, 9, 12, 18, as they are understood in view of the above 112 problem, Beine teaches an optic communication system (fig. 3) having a plurality of network elements of a first type (fig. 3, 202, 206) each having a plurality of transmitters (fig. 3, transmitters associated with 202 and 206), each of the transmitters inherently having a minimum power level, a maximum power level and a current power level; a network element of a second type (fig. 3, 204 and 350) having a first database (column 8, lines 28-29, "internal memory") containing a respective plurality of values of power level adjustments (column 8, lines 28-29, "power parameters"), and a second database (column 8, lines 31-32, "parameter table"), the network elements of the first type connected to the network element of the second type by optical fiber (fig. 3, 210, 212), the method comprising the steps of: reading the plurality of values of power level adjustments from the first database (column 8, lines 28-31, "downloads the power parameter"); calculating new values of transmitter power levels (column 8, lines 31-36, "power level parameters computed"); and setting the transmitter powers levels to the new power levels (column 8, lines 33-36). Beine differs from the claimed invention in that Beine does not specifically teach querying the transmitters for their minimum power levels, maximum power levels and current power levels and writing the information to the second database. However, Barnard teaches to query maximum, minimum and current power levels of transmitters (column 9, 23-28, minimum power level is the level that "channel fails"). Therefore, it would have been obvious for one of ordinary skill in the art at the time when the invention was made to query maximum, minimum and current power levels of transmitters, as it is taught by Barnard, and write the information

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to the second database in the system taught by Beine in order to make that information available on demand for adjusting power values of transmitters, and for system information inquiry by a system manager.

Regarding claims 2, 10, 13, 19, Beine further teaches to write the plurality values of power level adjustments to the second database (column 8, 31-32, "parameter table").

Regarding claims 3, 11, 14, 20, it is inherent that the step of querying the transmitters taught by Barnard further comprises checking for the communications problems between the transmitters and the second type network element because the querying involves monitoring the channel performance (column 9, 25-30).

Regarding claims 21-23, although neither Beine nor Barnard specifically use the term "computer-readable media embodying a program", but both references disclose flow charts (see Beine, figs. 9A-9B; and Barnard, figs. 8A-8C) which inherently are carried out by computer-readable media embodying programs. In addition, it would have been obvious for one having ordinary skill in the art at the time when the invention was made to implement a method using a computer system incorporated with a computer program product to automate the process for reading parameters, querying transmitters for their information, calculating new values of transmitters power levels based on predetermined criteria, and setting the transmitters to the calculated new power levels.

3. Claims 4-5, 15-16 are rejected under 35 U.S.C. 103(a) as being unpatentable over Beine et al. (U.S. Patent US 6,304, 347 B1) in view of Taylor et al. (U.S. Patent 6,684,030 B1).

Regarding claims 4, 15, as they are understood in view of the above 112 problem, Beine teaches a fiber optic communication system (fig. 3) having a plurality of network elements of a first type (fig. 3, 202, 206) each having a plurality of transmitters (fig. 3, transmitters associated with 202 and 206), a network element of a second type (fig. 3, 204 and 350) having a database (column 8, lines 28-29, "internal memory") containing a respective plurality of values of current power levels, previous power levels and power level adjustments of the transmitters (column 8, lines 28-29, "power parameters"). Beine further teaches reading the values of-current power levels, previous power levels and power level adjustments of the transmitters from the database (column 8, 29-31, "down load the power parameters"); Beine differs from the claimed invention in that Beine does not specifically teach a user interface and displaying the values of current power levels, previous power levels and power level adjustments of the transmitters on the user interface. However, Taylor teaches a communication system with user interface connection to output data and information (column 5, lines 7-35). Therefore, it would have been obvious for one of ordinary skill in the art at the time when the invention was made to connect a user interface and display the values of current power levels, previous power levels and power level adjustments of the transmitters on the user interface, as it is taught by Taylor, to the communication

system by Beine in order to make it easy for system management personnel to interact with the communication system and adjust the parameters of the system.

Regarding claims 5, 16, Beine further teaches checking for communication problem between the transmitters (fig. 3, transmitters in 202) and the network element of the second type (fig. 3, 204 and 350) (column 7, 18-20).

Claims 6-8, 17 are rejected under 35 U.S.C. 103(a) as being unpatentable over Beine et al. (U.S. Patent US 6,304, 347 B1) in view of Taylor et al. (U.S. Patent 6,684,030 B1) and further in view of Barnard et al. (U.S. Patent US 6,115,157).

Regarding claims 6, 17, Beine further teaches reading the values of-current power levels, previous power levels and power level adjustments of the transmitters from the database (column 8, 29-31, "down load the power parameters"); calculating new values of transmitter power levels (column 8, lines 31-36, "power level parameters computed"); and setting the transmitter powers levels to the new power levels (column 8, lines 33-36). The modified system by Beine and Taylor differs from the claimed invention in that Beine and Taylor do not specifically teach querying the transmitters for their minimum power levels, maximum power levels and current power levels and writing the information to the second database. However, Barnard teaches to query maximum, minimum and current power levels of transmitters (column 9, 23-28). Therefore, it would have been obvious for one of ordinary skill in the art at the time when the invention was made to query maximum, minimum and current power levels of transmitters, as it is taught by Barnard, and write the information to the second

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database in the modified system taught by Beine and Taylor in order to make that information available on demand for adjusting power values of transmitters, and for system information inquiry by a system manager.

Regarding claim 7, Beine further teaches to write the plurality values of power level adjustments to the second database (column 8, 31-32, "parameter table").

Regarding claim 8, it is inherent that the step of querying the transmitters taught by Barnard further comprises checking for the communications problems between the transmitters and the second type network element because the querying involves monitoring the channel performance (column 9, 25-30).

Conclusion

4. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Dugan et al. (U.S. Patent US 6,157,475) disclose an optical channel regulator and method. Taga et al. (U.S. Patent US 5,790,289) disclose a channel pre-emphasis technique for WDM optical communication.


Any inquiry concerning this communication or earlier communications from the examiner should be directed to Quan-Zhen Wang whose telephone number is (571) 272-3114. The examiner can normally be reached on 8:30 AM - 5:00 PM, Monday - Friday.

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If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Jason Chan can be reached on (571) 272-3022. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

qzw


M. R. SEDIGHIAN
PRIMARY EXAMINER